(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau

TIPO OMP



(43) International Publication Date 14 July 2005 (14.07.2005)

PCT

(10) International Publication Number WO 2005/063119 A1

(51) International Patent Classification⁷; G01N 21/65 A61B 5/00,

(21) International Application Number:

PCT/US2004/043759

(22) International Filing Date:

22 December 2004 (22.12.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/531,848

22 December 2003 (22.12.2003) US

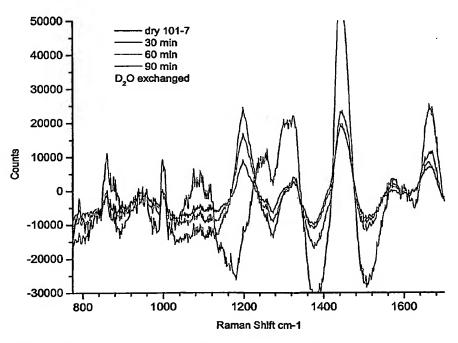
- (71) Applicant (for all designated States except US): LIGHTOUCH MEDICAL, INC. [US/US]; 2501 Woodland Road, P.O. Box 531, Bryn Athyn, PA 19009 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): CHAIKEN, Joseph [US/US]; 302 Edwards Drive, Fayetteville, NY 13066 (US). DRACKER, Robert [US/US]; 7716 Summerwood Place, Liverpool, NY 13090 (US). HAGRMAN, Pamela,

J. [US/US]; 917 Comstock Ave., Syracuse, NY, 13210 (US). HAGRMAN, Douglas [US/US]; 917 Comstock Ave., Syracuse, NY 13210 (US).

- (74) Agent: CANADY, Karen, S.; Gates & Cooper LLP, 6701 Center Drive West, Suite 1050, Los Angeles, CA 90405 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,

[Continued on next page]

(54) Title: PROCESS AND DEVICE FOR DETERMINATION OF CELL VIABILITY



(57) Abstract: Described is a method to determine the viability of cells by measuring the absolute and relative rate of metabolic activity and/or integrity of the cell membrane through the use of vibrational spectroscopy. The use of deuterated agents facilitates detection of changes associated with a change in viability.

WO 2005/063119 A1



FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— of inventorship (Rule 4.17(iv)) for US only

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.